ONTARIO PARKS

Pakwash

Preliminary Park Management Plan

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Invitation to Comment

Ontario Parks is presently undertaking the development of a management plan for Pakwash Provincial Park. As part of the planning process I am pleased to present the Pakwash Provincial Park Preliminary Management Plan.

The preliminary plan contains proposed policies relating to resource stewardship, operations and development that will guide the management of Pakwash over the next 20 years. After careful consideration of the background information collected and review of comments received, this document represents Ontario Parks' preferred policy for the park.

You are invited to review and comment on the preliminary management plan. All comments regarding the preliminary management plan should be submitted by *XXX* to the attention of:

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The MNR is collecting your personal information and comments under the authority of Ontario's *Provincial Parks and Conservation Reserves Act*. Any personal information you provide (address, name, telephone, etc.) will be protected in accordance with the *Freedom of Information and Protection of Privacy Act*, however your comments will become part of the record of consultation and may be shared with the general public. Your personal information may be used by the MNR to send you information about future MNR planning initiatives in the park area. If you have questions about the use of your personal information, please contact XXV, Ministry of Natural Resources Northwest Region, at XXX.

Your participation in planning for this provincial park is appreciated. All comments received will be considered during the preparation of the final Blue Lake Provincial Park Management Plan.

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Statement of Environmental Values and the Environmental Bill of Rights

The Ministry of Natural Resources' *Statement of Environmental Values* (SEV) under the *Environmental Bill of Rights* (EBR) describes how the purposes of the EBR are to be considered whenever decisions are made in the Ministry that might significantly affect the environment. This includes decisions made as a result of preparing management direction for a protected area.

The Ministry's SEV has been considered throughout the planning process. The management direction for Pakwash Provincial Park will further the objectives of managing Ontario's resources on an environmentally sustainable basis.

Planning Context

This preliminary park management plan has been prepared consistent with direction contained in *Our Sustainable Future, Ministry of Natural Resources Strategic Directions* (2005). The Ministry's vision is "sustainable development"; and the Ministry's mission is "ecological sustainability". The Ontario Parks program contributes mainly to the goal of: "Healthy Natural Environment for Ontarians", but contributes to other strategic elements as well. The mandate of the Ministry for Ontario Parks is to deliver Ontario's parks and protected areas program, which includes: the protection and management of provincially significant natural, cultural, and recreational environments; provincial parks operations; provision of tourism opportunities, natural heritage education; planning and management of parks and protected areas; policy leadership on conservation reserves; monitoring, auditing, and public reporting on Ontario's parks and protected areas.

This document has also been prepared consistent with direction contained in *Protecting What Sustains Us: Ontario's Biodiversity Strategy* (2005). Ontario Parks supports both the first goal "Protect the genetic, species and ecosystem diversity of Ontario", and the second goal: "Use and develop the biological assets of Ontario sustainably, and capture benefits from such use for Ontarians". In particular Pakwash will be managed to protect any species at risk and their habitats.

Aboriginal Context

Nearby First Nation communities include Lac Seul, Wabaseemoong, Grassy Narrows (English River) and Wabauskang. These First Nations are all within the boundary described by the Treaty #3 (Figure 1).

Pakwash Provincial Park overlaps traditional lands and waters of these four Aboriginal communities. Aboriginal communities use the area for hunting, trapping, fishing, gathering and travel.

In recognition of the Aboriginal archaeological features located within the park, Ontario Parks will have special regard for local First Nations' particular interests. Respect and protection of archaeological and cultural features are integral to this park management plan. The First Nations will be consulted on related issues of concern during the implementation of this plan.

1.0 INTRODUCTION

Pakwash Provincial Park is a natural environment class park of 3,993 hectares. The park is located 50 kilometres south of Red Lake, adjacent to Highway 105 and the shores of Pakwash Lake (Figure 1). The park is located within the Red Lake Administrative District of the Ontario Ministry of Natural Resources (OMNR). The park provides representation/protection of landforms and ecosystems within ecodistrict 4S-2, specifically the Hartman moraine. Area First Nation communities include Lac Seul, Wabaseemoong, Grassy Narrows (English River) and Wabauskang. These First Nations are all within the boundary described by Treaty #3. Other nearby communities include Ear Falls, Vermilion Bay and Balmertown.

The park was originally established in 1967 and expanded in 1989 (under Ontario regulation 290/89). The park is in two parcels. The smaller (Part 1 - 630.5 hectares) lies between Highway 105 and Pakwash Lake and contains the campground and day use areas. The larger parcel (Part 2 - 3,362.5 hectares) is across the lake and does not contain any infrastructure. The Pakwash addition was identified in the proposed West Patricia Land Use Guidelines as a natural environment class candidate park for representation of the Lac Seul basin landscape unit. The park addition also protects representative features of glacial Lake Agassiz, such as eskers, raised beach ridges and the Hartman moraine. The area features a rich mixed forest of spruce, jack pine, birch and poplar, and several rare plant species. The park is home to boreal forest wildlife, including moose, black bear, river otter, mink, bald eagle and osprey. White-tailed Deer, a southern species that has been moving into the boreal forest because of certain land use patterns and processes, has been observed in the park.

Pakwash is an operating park. Since 1996, the campground and day-use areas have been operated by the Friends of Pakwash and the Township of Ear Falls, in partnership with the MNR-Ontario Parks. Pakwash has 69 campsites, 26 of which have electricity. Group camping for up to 50 people can be accommodated and amenities are available from mid-May through Labour Day. Pakwash is a recreation destination for area residents from Kenora, Red Lake, Ear Falls and other regional communities. Visitors from Manitoba and the US Midwest also comprise a significant component of the park user base.

The approved park management plan will guide the management, operation and development of Pakwash over the next 20 years. At a minimum of every ten years this plan will be examined for the need for a review or amendment. Section 13 describes the process for review and amendment of the plan.

Pakwash Provincial Park Preliminary Management Plan has been developed in accordance with the Ontario Provincial Parks Planning and Management Policies (1992), Ontario's Living Legacy Land Use Strategy (1999) and the Crown Land Use Policy Atlas[1].In accordance with this plan, MNR will amend affected area-specific land use policies and mapping found in the CLUPA.

2.0 CLASSIFICATION

Through park classification, Ontario's provincial parks are organized into broad categories, each of which has particular purposes and characteristics.

Pakwash is classified as a natural environment park. Natural environment parks protect outstanding recreational landscapes, representative ecosystems and provincially significant elements of Ontario's natural and cultural heritage. These parks provide high quality recreational and educational experiences. Pakwash Provincial Park fulfills the park class representation target for natural environment class parks in Ecodistrict 4S-2.

[1] The Crown Land Use Policy Atlas can be found at the following: http://crownlanduseatlas.mnr.gov.on.ca/.

3.0 GOAL

To provide a variety of opportunities for compatible heritage appreciation, outdoor recreation, and scientific research activities in attractive surroundings, while protecting the park's important earth and life science features.

In fulfilling this goal, the park contributes to the achievement of all four program objectives for the provincial park system: protection, recreation, heritage appreciation, and scientific research.

Pakwash Provincial Park is governed by the *Provincial Parks and Conservation Reserves Act*, *Ontario Provincial Parks Policy* and *Ontario Provincial Parks: Planning and Management Policies* (1992), and *Ontario's Living Legacy Land Use Strategy* (1999).

4.0 OBJECTIVES

There are four objectives for the Ontario provincial parks system: *protection*, *recreation*, *heritage appreciation* and *scientific research*.

4.1 Protection Objective

To permanently protect representative ecosystems, biodiversity and provincially significant elements of the natural and cultural landscape of Ontario and to manage these in the context of maintaining ecological integrity.

Ontario's parks and conservation reserves play an important role in representing and conserving the diversity of Ontario's natural features and ecosystems, across the broader landscape. Protected areas include representative examples of life and earth science features, and cultural heritage features within ecologically or geologically defined regions. Ontario's ecological classification system provides the basis for life science feature assessment, and the geological themes provide the basis for earth science assessment.

4.1.1 Life Sciences

Pakwash is located on the eastern boundary of ecodistrict 4S-2 in the Southern Boreal Forest region. This ecodistrict is characterized by bedrock controlled, shallow, silty sand drift material with extensive areas of weakly broken clay plains. Terminal moraines are a dominant landscape feature standing out as ridges above an otherwise flat plain of glacial drift and lacustrine deposits.

Part 1 (the east part) of Pakwash Provincial Park exhibits upland deciduous and mixedwood communities as well as a significant wetland that occupies approximately half of the area of this parcel. Forests are dominated by upland jack pine, black spruce, and balsam fir, as well as aspen, white birch, and white spruce. There is an occurrence of a mature stand of red pine near the limit of its northern range. Significant botanical occurrences include Canada yew, water birch, wild ginger, nodding trillium and wild rice. The wetland communities include a large willow-alder swamp transitional towards a bog lowland community representing several stages of succession in association with raised strandlines (abandoned beach ridges) along the shore of Pakwash Lake.

Part 2 (the west part) of Pakwash Provincial Park exhibits community and species representation associated with the Hartman moraine including both upland deciduous and mixedwood communities as well as thicket swamp and treed bog.

The wildlife of Pakwash is representative of the Boreal Forest Region. Mammals include moose, black bear and timber wolf, as well as lynx, American marten, red fox, snowshoe hare, river otter, and beaver.

Pakwash Provincial Park is located in an area of the province which is known to be the southern range of both woodland caribou and wolverine, species which are designated

"threatened" on the SARO list[2]. Suitable habitat is present within the park for supporting caribou populations (mature conifer stands), and wolverine populations (presence of large ungulate populations). Two caribou sightings at the north end of Pakwash Lake have been reported to the OMNR. No sightings, however, have been documented in the park for caribou or wolverine during OMNR field surveys.

Fish species known to occur within the park include: Walleye, Northern Pike, Muskellunge, Yellow Perch, Lake Whitefish, Common White Sucker, Shorthead Redhorse, Burbot, Rock Bass, Smallmouth Bass, Mooneye, Cisco, and Spottail Shiner.

There is a fish sanctuary adjacent to the park on the west shore of Fisherman's Bay. It is outside of the park but immediately adjacent. No fishing is permitted between April 15 and May 31.

Pakwash Provincial Park represents a number of distinct communities that are representative of the boreal forest. One of the many important functions that the boreal forest region provides is substantial amounts of breeding habitat for songbirds. It is reported that about 50% of all bird species (Neotropical migrants) found in North America regularly use or breed in the boreal forest. The birds of the park are typical of the Boreal Forest and include a wide variety of songbirds, raptors, shorebirds, and waterfowl,such as the Blackburnian Warbler, Magnolia Warbler, Ruby-crowned Kinglet, Black-capped Chickadee, Boreal Chickadee, Common Goldeneye, Common Raven, Ruffed Grouse. In recent field surveys a total of sixty-five bird species were recorded as seasonal residents of the forest habitats of Pakwash Provincial Park.

The American White Pelican is one of the largest birds in North America with a 3 metre wing span. It winters along coastal areas and breeds on remote islands in freshwater lakes, surviving on a diet of fish. This species is considered "threatened" on the SARO List (OMNR 2009) with confirmed breeding limited to Lake of the Woods and Lake Nipigon in Ontario. In 2007, 15 individuals were located on a small island just outside the park on Pakwash Lake. The breeding status of the bird is not yet confirmed.

The shoreline areas of Pakwash Lake provide important habitat for the Bald Eagle. The Bald Eagle is a well-known large bird of prey that feeds on fish and small mammals, and constructs stick nests that are usually close to water bodies. This species was identified as having special concern status in northern Ontario (OMNR 2006). This status was recently updated from endangered as the Bald Eagle has had a positive recovery since DDT and other pesticides were banned and aggressive recovery strategies were put in place.

Two species have been observed in the park that are considered rare in Ontario. The Great Gray Owl is a large owl found in the boreal forest across the northern hemisphere. The owl breeds sparsely throughout northern Ontario with nests frequently located in stands of poplar or spruce adjacent to, or comprising 'islands' within, extensive tracts of muskeg.

An immature Rusty Blackbird has also been observed in the park. The preferred breeding habitat of Rusty Blackbirds includes bogs, fens and other openings in the forest canopy. This species is considered a species of "special concern" nationally. Little research has been conducted on the Rusty Blackbird due to its tendency to be a solitary bird that lives in remote and inaccessible areas. The Canadian boreal forest serves as the habitat for 70% of the global population. Several indices indicate that the Rusty Blackbird has experienced significant decline in the last 40 years due to habitat loss (COSEWIC 2006).

[2] These species are designated as Threatened by the National Commission on the Status of Endangered Wildlife in Canada (COSEWIC). The species is also recommended designated as Threatened (S3/S4) provincially, by the Committee on the Status of Species at Risk in Ontario (COSSARO) on Ontario's Species at Risk List.

Two other birds were found in Pakwash Provincial Park that are scarce in the boreal forest. These birds include the Brown-headed Cowbird, which breeds mainly within the more heavily agricultural parts of Ontario, and the White-breasted Nuthatch, a species normally found in mature broad-leaved woodlands or mixedwood forests (Cadman et al. 1987).

Some species use the park during migration, but breed further north and are associated with bogs, marshes and meadows along the Hudson and James Bay. The most notable species recorded is the Arctic Tern, a medium-sized bird that breeds in the arctic and subarctic and is considered to be provincially rare in Ontario (S2/S3B). Other migrating birds of note include the Lapland Longspur and the American Wigeon.

4.1.2 Earth Sciences

Pakwash Provincial Park is underlain directly by Precambrian bedrock, consisting of highly foliated Keewatin sedimentary rocks (arkose, greywacke and quartzite) and volcanic rocks (intermediate to basic lavas) of the English River and Uchi Subprovinces, Superior Province.

Several linear features associated with flat wetlands occur along the shore of Pakwash Lake within Part 1 of the park. They form low wide ridges roughly parallel to the present lake shore. The ridges are interpreted to represent former strandlines of waning lake levels in the Pakwash Lake basin and are likely associated with a very late phase of glacial Lake Agassiz. The strandlines are situated on a sand/clay plain that slopes gently towards the lake and that displays a significant successional vegetation pattern. The most recent ridge is the present day Pakwash beach. The ongoing successional processes associated with these strandlines are of educational, interpretive and scientific value.

Part 2 of Pakwash Provincial Park was added in 1989 to provide representation of significant earth science features including the Hartman Moraine and the Lac Seul basin with clays originally deposited in glacial Lake Agassiz. The portion of the Hartman Moraine contained within the park represents an ice-recessional position of the retreating Patrician glaciers in the waters of glacial Lake Agassiz. The withdrawal of ice from the position marked by the Hartman Moraine initiated the Timiskaming Interstadial about 10,000 years ago, the great warming trend that saw most of the continental ice mass clear Ontario. The Hartman Moraine may represent an interlobate moraine, formed between two retreating ice lobes. Further evidence of glacial Lake Agassiz consists of well-developed sets of raised beach ridges. At least three levels of raised beach ridges have been observed generally occurring between 370 and 400 metres elevation. The beach ridges are quite extensive on each portion of the segmented moraine with the higher ridges completely encircling the central ridge similar to a contour line on a topographic map. These features make significant contributions to the earth science protection objective and the raised beaches, in particular, are of exceptionally high scientific and interpretive value.

4.1.3 Cultural Resources

Cultural features are specific locations that host the physical traces, and their associated values, of past human occupation or activity.

Pakwash Provincial Park contains one known archaeological site (EeKi 2) in Part 1 of the park. The site is a small prehistoric camp. To date, there have been no archaeological sites identified within the boundaries of Part 2 of Pakwash Provincial Park. Pakwash Lake is part of the Chukini and English River waterway, a historically important waterway to Aboriginal people.

4.2 Recreation Objective

To provide visitors with opportunities for ecologically sustainable land and water based outdoor recreation such as car camping and to encourage associated economic benefits.

In 1998, most visitors to Pakwash were from

the American Midwest (66.7%), specifically Minnesota, Wisconsin and Michigan, and from northwestern Ontario (33.0%). Compared to the 2002 camper origins for Northwestern Ontario, 50% originated in Ontario, 32.4% originated in other provinces and 17% came from the United States. This is in contrast to the 2002 origins of park users on a province-wide basis where the majority of park visitors (78.9%) came from eastern and central parts of Ontario, 11.8% originated in other provinces and 9.3% of visitors came from the United States.

Pakwash offers opportunities for car camping in the campground in Part 1 and interior camping on the shore of Pakwash Lake in Part 2. The park provides campers and day-visitors with opportunities for hiking, swimming, picnicking, fishing and boating.

Campers engage in resting/relaxing, nature viewing/lookouts, trail hiking, swimming /wading, casual play, fishing, picnicking, using playground equipment, biking, canoeing, motorboating (Ontario Parks 1998).

The length of stay for campers ranges from 2.0 to 3.4 nights. The average party size ranges from 2.7 to 3.3 and the July/August occupancy rate averages close to 44% (Ontario Parks Statistics 2007).

A large proportion of day-users visiting Pakwash are tourists from the region (60%), as well as from the US Midwest (18.5%) and western Canada (11.1%) who visit the park as one of several destinations or as an unplanned stopover en route. Day-users visiting Pakwash are typically members of family groups participating in picnicking, relaxing, walking on the beach, swimming or wading.

Red Lake District Canoe Route #74 passes through Pakwash Lake and backcountry camping and the use of shore lunch sites occurs along shorelines in both parts of Pakwash Provincial Park.

4.3 Heritage Appreciation Objective

To provide opportunities for residents of Ontario and visitors to increase their knowledge and appreciation of Ontario's natural and cultural heritage.

There are three levels of Natural Heritage Education service in the provincial park's system: *Self-use*, *Seasonal Activity*, and *Major Activity*. Pakwash offers a self-use level of programming. Self-use facility parks provide comprehensive information / orientation services as well as self-use facilities such as trails.

Based on the region's natural features and history, a number of interpretive themes have been identified for Pakwash Provincial Park. These include the successional ecology of the wetlands associated with the Pakwash Lake strandlines and the glaciation of the Canadian Shield with emphasis on the formation of the Hartman Moraine.

4.4 Science Objective

To facilitate scientific research and to provide points of reference to support monitoring of ecological change on the broader landscape.

Ontario's provincial parks and conservation reserves play an important role in the provision of places to undertake research activities to: provide a better understanding of protected area environments, contribute to appropriate management practices and actions, and provide baseline ecological information that can be used to support ecological monitoring on the broader landscape.

For example, a total of nine Rapid Assessment Plots (RAPs) were established during two days of field work in Pakwash Provincial Park in June 2007. Baseline information was collected on vegetation, soil, and ecosite types, as well as incidental floral

and faunal observations.

5.0 BOUNDARY

Pakwash Provincial Park is in two parcels. Part 1 being comprised of 590 hectares is situated between Highway 105 and Pakwash Lake. The park boundary of Part 1 abutting Pakwash Lake is set at water's edge except for that part in the southern bay where the boundary is set to include 91.44 metres of the lakebed of Pakwash Lake. Part 2 at 3,680 hectares is located across the lake. The lakebed park boundary of Part 2 is positioned 100 metres in perpendicular distance from the contour of elevation 345.948 Geodetic Survey of Canada (G.S.C.) regulated level of Pakwash Lake. Refer to Figure 4.

There are three parcels of patent land adjacent to the southern boundary of Part 1 of the park: Registered Plan 534 (8 lots), RFD 272, and RFD Pakwash Lake Camp.

Ontario Parks is committed to an ecosystem approach to park planning and management. The Provincial Parks and Conservation Reserves Act, which governs activities within provincial parks, pertains only to lands and waters within park boundaries. An ecosystem approach allows park management to consider the relationship between the park and the surrounding environment.

Park management plan policies apply only to the area within the regulated boundary of the park. Within the park boundary, the protection of park values and features will be achieved through appropriate zoning, control of land use and activities, education, and monitoring of ecological impacts.

Ontario Parks will support in principle the acquisition of property for addition to the park, if acquisition will enhance the values of the park. Acquisition or securement will be subject to funding and willingness of the owners to sell or lease their properties or enter into a conservation easement.

6.0 PROPOSED ZONING

Land within Pakwash Provincial Park is zoned in accordance with its natural and cultural features and values, and their sensitivity to development. It is proposed that Pakwash be managed under four proposed zones: nature reserve, natural environment, access and development, based on the *Ontario Provincial Parks: Planning and Management Policies*.

The zones differentiate the sensitivity of the natural and cultural values, and the degree of development, recreational uses and management practices within the park.

6.1 Nature Reserve Zones

Nature reserve zones protect the provincially significant earth and/or life science features within a park, and may include a protective buffer area in which minimal development is permitted. Development is generally restricted to trails, necessary signs, interpretive facilities (where warranted) and temporary facilities for research and management.

Two nature reserve zones are proposed for Pakwash Provincial Park.

NR1 Strandline-wetland (462 hectares)

The Strandline-wetland nature reserve zone is located in Part 1 of Pakwash Provincial Park. NR1 protects both the earth science features and the life science features associated with raised strandlines (abandoned beach ridges) along the shore of Pakwash Lake. These include a large willow-alder swamp transitional towards a bog lowland community representing several stages of wetland succession. The ongoing successional processes associated with these strandlines are of educational, interpretive and scientific value.

NR2 Hartman Moraine (3029 hectares)

The NR2 Hartman Moraine nature reserve zone is located in Part 2 of Pakwash Provincial Park. NR2 includes part of

the Hartman Moraine which represents a recessional or interlobate moraine that demonstrates that the ice in this region halted here during retreat, and that multiple lobes of the ice may have been active here. The retreating Patrician glaciers were in almost constant contact with the waters of glacial Lake Agassiz. Further evidence of glacial Lake Agassiz consists of at least three levels of well-developed sets of raised beach ridges. These features make significant contributions to the protection objective, and the raised beaches in particular are of exceptionally high scientific and interpretive value. NR2 is set back 200 metres from the shore of Pakwash Lake to provide continued opportunities for interior camping on the shores of Pakwash Lake in association with canoe route #74.

6.2 Natural Environment Zones

Natural environment zones include natural landscapes which permit the minimum level of development required to support low-intensity recreational activities. Development is generally limited to back-country campsites, portages, necessary signs and minimal interpretive facilities.

Two natural environment zones are proposed for Pakwash Provincial Park.

NE1 (25 hectares)

The remainder of Part 1 of Pakwash Provincial Park that is not designated nature reserve or development zone is designated as natural environment zone NE1. This is comprised of the bed of Pakwash Lake that is adjacent to the developed area of the park. This zone is intended to provide opportunities for nature appreciation and low-intensity day-use recreation. The only facility associated with this zone is the boat launch situated between the day use area and the south campground.

NE2 (348 hectares)

The remainder of Part 2 of Pakwash Provincial Park that is not designated nature reserve zone is designated as natural environment zone NE2. This includes the bed of Pakwash Lake that is included in the regulated boundary of the park in addition to a 200 metre setback from the shore of Pakwash Lake. This zone is intended to provide continued opportunities for interior camping on the shores of Pakwash Lake in association with canoe route #74.

6.3 Development Zone

Development zones contain the area(s) of the park geared towards the support of intensive day-use and car camping activities. They constitute a relatively small portion of most parks. Development may include roads, visitor control structures, beaches, picnic areas, car campgrounds, commercial service facilities, maintenance facilities, park office and orientation, interpretive, educational, research and management facilities.
One development zone is proposed for Pakwash Provincial Park.

D1 Campground and Day-use (61 hectares)

D1 is located in Part 1 of Pakwash Provincial Park. User activity and facility development is concentrated in D1 (Campground and Day-use development zone) which is located in the central portion of the park. Existing development in D1 consists of campgrounds, a day-use area, and the park administrative complex.

6.4 Access Zone

Access zones serve as staging areas, a means of both providing and regulating use in areas of a park geared towards extensive recreation. Generally, development is limited to roads, visitor control structures and group campgrounds. Provisions may be made for limited orientation, interpretive or educational facilities, for self-use rather than through structured personal service. Limited facilities for research and park management may also be present.

A1 North hydro corridor (90 hectares)

A1 includes the area adjacent to the west side of Highway 105 from the northern park boundary to the development zone boundary. It contains the hydro corridor that runs alongside the highway corridor.

7.0 RESOURCE STEWARDSHIP POLICIES

The stewardship of Pakwash Provincial Park's natural and cultural resources will conform to the policies identified for natural environment class parks in *Ontario Provincial Parks: Planning and Management Guidelines* 1992 and *Ontario's Living Legacy Land Use Strategy* 1999. Additional policy direction is provided in the following section.

Resource stewardship initiatives may be accomplished through partnerships and sponsorships. All resource stewardship activities will be undertaken in accordance with requirements under the *Provincial Parks and Conservations Reserves Act, Environmental Assessment Act* and *the Provincial Parks and Conservation Reserves Class EA*.

Inventory, monitoring and assessment will be used to determine the effectiveness of Resource Stewardship and Operational Policies. This may indicate a need to adjust the management if expected results are not realized.

Adaptive management is a process for continually improving management policies and practices by learning from the outcomes of operational programs. Monitoring to assess whether management techniques are achieving the stated objectives is an essential component to adaptive management. All activities permitted, prohibited, or not yet identified to occur on the site will be monitored, as required, to ensure that natural heritage values and public safety are not compromised. Where monitoring indicates techniques are not effective, adjustments will be made to the operation and management of the site.

Figure 1: Adaptive management process

7.1 Aboriginal Uses of Natural Resources

Lac Seul, Wabaseemoong, Grassy Narrows (English River) and Wabauskang First Nations, are all within the boundary described by Treaty #3. Pakwash Provincial Park is part of the traditional use area of these Aboriginal communities. Aboriginal communities use the area for hunting, trapping, fishing, wild rice harvesting and other gathering and travel.

7.2 Industrial / Commercial Uses

The following uses are not permitted in Pakwash:

- Commercial forestry,
- Prospecting, staking mining claims, developing mineral interests, working mines,
- Extraction of sand, gravel, topsoil or peat.
- Generation of electricity.
- Other industrial uses.

The following uses are permitted in Pakwash:

- Four commercial baitfish blocks that include Pakwash Lake.
- One commercial trapline that includes Pakwash Provincial Park, which will be modified as discussed in Section 7.8.

7.3 Land Management

The management of the park's land base will be directed toward maintaining the natural landscape. There is only one form of alienated land tenure within the park:

- A waterpower lease (agreement #43) with Ontario Hydro. This lease permits flooding on Pakwash Lake to the 347.5 metre contour elevation. It was issued June 4, 1956 to the Hydro-Electric Power Commission of Ontario and is still in effect. The term of the lease is 99 years so it will expire in 2055.

New mining activity, including prospecting, staking of mining claims and development of mines is not permitted in Pakwash Provincial Park. The Ministry of Natural Resources, Ontario Parks will monitor mining interests on Crown land adjacent to the park on a case-by-case basis, to identify potential negative impacts on park values.

Aggregate for park purposes will be acquired from commercial sources outside the park.

Land disposition for the private use of individuals is not permitted. No land disposition for commercial use will be considered due to the fact that opportunities exist for commercial dispositions on Crown land outside of the park.

7.4 Water Management

Water quality will be monitored on a regular basis in the development zone in accordance with current Ontario Safe Drinking Water Regulations, and the Ontario Beach Management Protocol.
Surrounding land use does not presently have a direct impact on the water quality for recreation.

7.5 Forest Fire Management

MNR recognizes fire as an essential ecosystem process, fundamental to restoring and maintaining the ecological integrity of protected areas in the Boreal Forest Region.

Fire is a major natural disturbance in the Boreal West forest region. Fire is most frequent and has greatest severity in coniferous forests compared to the less flammable deciduous forests The relatively short fire cycles of the boreal forest create a forest mosaic mainly composed of pure or mixed, even-aged stands at different stages of recovery following fire (Van Sleeuwen, 2006).

The Forest Fire Management Strategy for Ontario (OMNR, 2004) provides strategic direction for the management of wildfire across Ontario. Pakwash Provincial Park is in the Boreal Fire Management Zone according to this provincial strategy.

Fire management within Pakwash Provincial Park will help to restore and maintain ecological integrity while preventing personal injury, value loss, and social disruption.

In particular, fire management will help to:

- Perpetuate naturally occurring vegetation communities and their underlying ecological processes
- Improve ecosystem health and reduce vulnerability to insects and disease
- Reduce fire hazards, including accumulations of biomass that function as fuels
- Restore the naturalness of the environment through reintroducing fire as a natural processes
- Provide opportunities for protected area visitors to appreciate and learn about the natural role of fire.

Fires that pose a threat to public health and safety, property and infrastructure, or other values will receive a full response and sustained action. Sustained action, if required, will be directed through an approved Fire Assessment Report that has been developed in consultation between the Park Superintendent or Zone Manager and authorized fire management personnel.

Prescribed burning is the deliberate, planned and knowledgeable application of fire by authorized personnel to a specific land area to accomplish pre-determined objectives. Prescribed burning to achieve ecological or hazard reduction objectives may be considered, for example for the purpose of hazard reduction and stand regeneration.

Opportunities for prescribed burning will be considered within the park to achieve ecological or hazard reduction objectives. Any prescribed burns will be planned and executed in accordance with MNR Policy.

7.6 Species at Risk

Species at risk will be protected consistent with the *Endangered Species Act* and regulations.

7.7 Vegetation

Management of vegetation within the park will be directed towards the maintenance of an evolving natural succession of communities.

Infestations of forest insects and diseases will be monitored and assessed. Non-native insect species may be controlled in all zones, and native insect species may be controlled only in the development and access zones if the present a human health hazard/nuisance. If control measures are undertaken, they will be applied to minimize effects on the general park environment.

The removal of hazard trees will be permitted in all zones where safety is a concern (e.g., trails, and campgrounds). Areas experiencing adverse use impacts will be rehabilitated whenever possible using plant species native to the park. Landscaping will be permitted in the development zones; effort will be made to incorporate natural features and native species will be exclusively used for restoration of vegetation.

Brushing along primary and secondary roads as well as along hiking trails will be permitted to improve sight lines and/or traffic flow.

Herbicide applications will not be used for vegetation management. Manual methods will be used for vegetation management.

Any development that requires the removal of vegetation will be supported by a vegetation inventory in accordance with approved site plans.

7.8 Wildlife

Hunting has not occurred since the park was regulated in 1967 and expanded in 1989. Hunting is not permitted in Pakwash Provincial Park.

Red Lake District manages 1 trapline (RL68) located to some degree within the park boundary. Trapping by non-Aboriginal people will be phased out of nature reserve zones in the park by January 1, 2010. The need for a review of the phase out policy is under consideration by MNR. If undertaken, the review and resulting policy will be applied to the traplines that fall within nature reserve zones.

Animal populations may be controlled when essential to human health and safety, the health of the species outside the park, or the values for which the park has been established. Where control is necessary, techniques that have minimal effect on other components of the park's environment will be used. Appropriate methods of population control may be undertaken directly by Ontario Parks, or through partnerships under the supervision of Ontario Parks, and consistent with appropriate legislation (e.g. *Fish & Wildlife Conservation Act, Migratory Birds Convention Act* (Canada)).

7.9 Fisheries

Sport fishing is permitted in the park. Pakwash Lake is a popular fishing lake with walleye,

smallmouth bass, lake whitefish, and northern pike. All fishing activity is subject to provincial and federal fisheries regulations (*Fish and Wildlife Conservation Act* and the *Fisheries Act* (Canada)) as set out in the Ontario Recreational Fishing Regulations Summary.

Commercial bait harvesting in the portions of the four commercial baitfish blocks that include Pakwash Lake will be permitted to continue indefinitely because the waters of the park are all contained within natural environment zones. Baitfish harvesters will be permitted to continue to access their blocks, including mechanized travel by aircraft, ATV or snowmachine.

7.10 Cultural Resources

Cultural resources in Pakwash Provincial Park will be managed to ensure their protection, and to provide opportunities for heritage appreciation and research, where these activities do not harm the resource. This will be achieved through zoning and by controlling any recreational activities, development and research that may occur in these areas.

In the event of additional discoveries of archaeological sites, Ontario Parks will work with the Ministry of Culture in the inventory, protection and maintenance of the site. If deemed appropriate for the protection and preservation of cultural resources, such inventory may include excavations of archaeological sites. Excavations by authorized licensed personnel with appropriate research permits will be conducted under the approval and supervision of the above ministries. Upon completion of an excavation, the site or portions of the site will be returned to their original condition, or will be developed for the purpose of interpreting the cultural resources of the site. The type and extent of such development will be determined by the findings from the excavation.

The removal of artifacts or destruction of historical features is prohibited by the *Provincial Parks and Conservation Reserves Act*[3].

7.11 Research

Ontario Parks encourages scientific research by qualified individuals who can contribute to the knowledge of natural and cultural history and to environmental management in provincial parks. All research at Pakwash will be conducted by, or authorized (i.e., by permit) by, Ontario Parks. Research must also meet all requirements under applicable provincial and federal legislation. Approved research and monitoring activities must be consistent with Ontario Parks' Research and Information Strategy (1997). Temporary facilities in support of approved research and monitoring activities may be considered.

Approved research activities and facilities will be compatible with protection values and/or recreational uses in the park, and will be subject to development and management policies associated with the park's classification unless special permission is given. Sites altered by research activities will be rehabilitated as closely to their previous condition as possible.

7.12 Inventory and Monitoring

Planning and management decisions are intended to ensure the ecological sustainability of protected areas (which includes social and economic components). Ontario Parks will ensure that these decisions are made with the best available information. Where this information is lacking, Ontario Parks may conduct inventories and monitoring, as necessary, to provide this information. Such efforts will be undertaken based on established methodologies and best

[3] 2. (1) No person shall, (b) damage or deface any relic, artifact or natural object or damage or deface any site of archaeological or historical interest in a provincial park. O. Reg. 347/07, s. 2 (1).

practices. This will foster an adaptive management approach to protected areas management. The following are broad approaches to identifying inventory and monitoring needs: management actions identified in this management plan; public input; routine park maintenance activities; staff knowledge and experiences and environmental scans.

8.0 OPERATIONS POLICIES

A park operations plan will be prepared to provide park staff with the necessary direction required to operate the park on a day to day basis. In addition to addressing the operations policies that follow, the plan will include such topics as budget, staffing, maintenance schedules, enforcement, and emergency services. Wherever applicable, the provisions of the plan will be consistent with the approved *Ontario Provincial Parks Minimum Operating Standards*, and will be reviewed annually and updated as required.

8.1 Natural Heritage Education

As outlined in the *Strategic Plan for Natural Heritage Education in Ontario Parks* 2005 – 2010 (2005), the goal of the natural heritage education (NHE) program is to develop visitor awareness and appreciation of Ontario Parks' natural and cultural heritage, fostering a commitment to its protection for all generations. Opportunities to do so will be educational and recreational, formal and informal, and accessible to all people.

The objectives of the NHE program are to provide basic information in all parks; interpretation of Ontario's natural and cultural heritage in provincial parks; and outdoor recreation in representative landscapes in Ontario. There are three levels of NHE service in the provincial park's system: *Self-use, Seasonal Activity,* and *Major Activity*. Pakwash offers a self-use level of programming. Self-use facility parks provide comprehensive information / orientation services as well as self-use facilities such as trails. Regular park staff maintains these facilities.

A Natural Heritage Education Plan and an annual NHE operating plan may be prepared for Pakwash if deemed necessary. Direction will be taken from provincial policy, the *Northwest Zone Natural Heritage Education Plan*, and the park management plan. The Pakwash Natural Heritage Education plan will be reviewed and updated as required. The scope and intent of all NHE activities will be carefully defined to ensure their compatibility with park features. Programming will include the three components of Natural Heritage Education: *information*, *interpretation* and *outdoor recreation*.

8.1.1 Information

The use of the public information program (e.g., Parks Guide, park tabloid, park maps and the Ontario Parks website) will continue. It will provide visitors with information about the park and its resources, environment and facilities, the park system and local attractions. This information emphasizes the visitor's role in maintaining the natural environment of the park, appropriate behaviour in the park, safety in the outdoors, and nuisance animals. Park literature will also advise visitors about commercial services and attractions in the local area and other provincial parks.

8.1.2 Park Interpretation

Self-use interpretive facilities will provide park visitors with a greater appreciation and understanding of the natural features of Pakwash Provincial Park. Printed material, self-use facilities and informal personal contact will be the primary means of interpretation. Additional public programs and special events are offered at the discretion of the park superintendent.

At Pakwash, the primary interpretive themes are:

- The successional ecology of the wetlands associated with the Pakwash Lake

strandlines.
- The glaciation of the Canadian Shield with emphasis on the formation of the Hartman Moraine.

8.1.3 Outdoor Recreation

Park visitors will be informed about the opportunities for recreation offered both in the park and in the local area. Visitors will be encouraged to use safe boating practices through the park's information program.

Outdoor recreation skills programs that are offered will be compatible with the park's resource base and the park's interpretive themes, and may include hiking, cross-country skiing, snowshoeing, canoeing, camping, wildlife viewing, geocaching, and orienteering.

8.2 Recreation Management

Recreation management provides a variety of recreational opportunities while seeking to minimize negative environmental impacts. Recreational activities that are incompatible with the park goal or with specific zones are prohibited or restricted. Prevention and control of such activities will be achieved through enforcement, compliance, and education of park visitors concerning appropriate activities in the park in general and within specific zones.

8.2.1 Day-Use Area

The campground and day-use areas are operated by the Friends of Pakwash and the Township of Ear Falls, in partnership with the MNR-Ontario Parks. Pakwash is a destination for local residents from Ear Falls and a stopover for travellers on Highway 105. The 1.5 kilometre sand beach, playground and the inviting waters of Pakwash Lake make Pakwash ideal for swimming, boating and fishing.

The park's day-use facilities are located adjacent to Pakwash Lake. The sites include picnic tables, a picnic shelter, fireplace grills, potable water, and vault privies and playground equipment. The beach provides opportunities for swimming, and beach play. A boat launch and fish cleaning hut are between the campground and the day-use area.

8.2.2 Campgrounds

Pakwash Provincial Park has 69 campsites,

26 of which are electrical. Approximately one quarter of the sites are pull-through for trailers and recreational vehicles. There is one group camping area at Pakwash, which can accommodate up to 50 people.

Campground amenities include vault privies, a comfort station with shower and laundry facilities, trailer service facilities, water outlets, garbage disposal, recycling depots, and firewood sales.

All campgrounds and campsites will be monitored to ensure their continued viability. This will include necessary improvements to bring them to Ontario Parks' operating standards.

Pakwash offers a designated number of seasonal leases for sites. Leases are awarded annually through a draw. This practice will be reviewed annually to ensure its continued feasibility for economic return to the operating partner. Lease sites will be rotated to minimize cumulative impacts to the sites.

Backcountry/interior camping is permitted in Pakwash Provincial Park, and occurs to a limited extent on several non-designated sites (four of which are within the park boundary) on the shoreline of Pakwash Lake in association with canoe route #74.

8.2.3 Services for Visitors

Pakwash is located in the Sunset Country Travel Area, which spans northwestern Ontario from Fort Frances to Upsula and north to Red Lake and Pickle Lake.

The development of Ontario Parks' or private commercial tourism operations such as food and beverage services, recreation equipment rental/sales and retail sales will be determined through business planning, in conjunction with the Northwest zone and Ontario Park's park marketing plan.

8.2.4 Trails

There is one interpretive/hiking trail in the park: the Beaver Pond Trail (1.9 kilometres). This trail crosses the strandlines willow-alder swamp, passing by a beaver pond and through a wooded area.

8.2.5 Mechanized Travel

Recreational motorized vehicle use including ATVs and snowmachines, on the park hiking/interpretive trail is prohibited. Off-road and off-trail use of ATVs and snowmachines is prohibited in the park, with the exception of persons who hold a license to trap or harvest baitfish (see section 7.9).

Mountain bikes are permitted on campground roads only; they are not permitted on the park hiking/interpretive trail.

8.3 Partnerships

Ontario Parks has been operating Pakwash through a partnership agreement with the Township of Ear Falls since 1996. Ontario Parks will continue to work with the Friends of Pakwash and the Township of Ear Falls, to provide campground operations in Pakwash Provincial Park subject to the regular review and renewal of the partnership agreement.

With the approval of the park management plan, the operating partner will work with Ontario Parks to assist with the implementation of the park management plan and will follow provincial park policies and regulations.

9.0 MARKETING AND COMMUNICATIONS

9.1 Marketing

A marketing plan may be developed for Pakwash Provincial Park in accordance with the *Northwest Zone Marketing Plan,* the *Ontario Parks Marketing Plan* and established Ontario Parks policy. It will be reviewed and revised as required. Marketing activities will be consistent with the zone and provincial marketing plan.

9.2 Communications

Pakwash uses the standard public information program (e.g., Parks Guide, park tabloid, park maps and the Ontario Parks website). This public information program will continue.

10.0 DEVELOPMENT POLICIES

All development undertaken by Ontario Parks, or by partners on its behalf, will comply with *A Class Environmental Assessment for Provincial Parks and Conservation Reserves (2004)*, and will be carried out in accordance with approved site and development plans that meet development standards for provincial parks.

Areas proposed for development will require prior assessment for significant cultural heritage features and natural values - such as species at risk - to ensure these values are identified and protected at the site.

10.1 Campgrounds / Campsites

The campground at Pakwash may be expanded by as many as 20 sites, with associated infrastructure, when the demand for such facilities becomes evident.

10.2 Roads

The construction of new roads, bridges and utility corridors for park purposes will be directed by approved implementation and site plans. Such projects will be permitted in the development zones only. Construction will be closely monitored. No development will be carried out prior to detailed archaeological

assessments and approved site plans.

10.3 Day-Use Area

Ontario Parks will continue to monitor the quality of the day-use area. Development in the day-use area will focus on:

- Re-design and re-development to improve quality and operational effectiveness; and,
- A limited amount of new development to provide additional day-use opportunities (i.e., picnic shelters).

Where user conflicts or operational inefficiencies exist, separation of day-use and camper activity will be undertaken.

10.4 Trails

The construction of new trails in the nature reserve, natural environment and development zones will be subject to approved site plans.

10.5 Maintenance and Administrative Areas

The park warehouse, office and gatehouse will be upgraded / replaced as required.

11.0 IMPLEMENTATION PRIORITIES

Park development, operations and resource stewardship will be contingent upon the availability of funding and unforeseeable changes in priorities or policy. Implementation of the management plan and operation of the park will meet the requirements of the *Environmental Assessment Act*, *Environmental Bill of Rights*, *Provincial Parks and Conservations Reserves Act*, *Endangered Species Act*, and other pertinent legislation.

All aspects of park management, development and operation will be undertaken in accordance with the requirements of *A Class Environmental Assessment for Provincial Parks and Conservation Reserves*.

Park development proposals will be phased in as follows:

11.1 Stage One

- Development of a Natural Resource Stewardship strategy to explore ways to manage fire, and maintain the biodiversity and ecological integrity of the park, while balancing this with the needs of the park users.
- Replacement and / or upgrading of park facilities as required.
- Preparation of a Natural Heritage Education Plan.
- Preparation of a park marketing plan/strategy.
- Annual review of the operating plan, the business plan and natural heritage education plan.

11.2 Stage Two

- Archaeological assessment of the development zone

12.0 SUMMARY OF PUBLIC CONSULTATION

Public consultation was an important part of the Pakwash park management planning process.

Phase 1 - Invitation to Participate; Terms of Reference October 2, 2006 – November 16, 2006

The Invitation to Participate and to review the Approved Terms of Reference stage included newspaper advertisements, distribution to the mandatory contact list as well as to known stakeholders, posting the *Environmental Bill of Rights* electronic registry (EBR) proposal notice, distribution to park, zone and district offices, and Ministry of Natural Resources Information Centre in Peterborough.

One written comment was received at the northwest zone office from October 2 to November 16.

Phase 2 - Preliminary Management Plan

The public will have an opportunity to review the Preliminary Management Plan for a minimum period of forty-five (45) days after its formal release. This will allow interested participants to comment on proposals in the plan.
Ontario Parks will retain on file reference copies of the Preliminary Management Plan and the approved Park Management Plan.

13.0 PLAN AMENDMENT and REVIEW

The management plan for Pakwash Provincial Park can be reviewed to address changing issues or conditions as necessary. At a minimum of every ten years this plan will be examined for the need for a review or amendment. This may involve a reassessment of all or part of the plan, including classification, zoning, goal, objectives and all resource management, operations and development policies. An amendment can be considered to address specific issues or needs. Any person may initiate an amendment, with an explanation of its purpose, to Ontario Parks, which will determine whether, and under what conditions, the amendment process should proceed.

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Appendix I SPECIES LIST

Plants:

aspen (*Populus tremuloides*)
balsam fir (*Abies balsamea*)
black spruce (*Picea mariana*)
Canada yew (*Taxus canadensis*)
jack pine (*Pinus banksiana*)
nodding trillium (*Trillium cernuum*)
red pine (*Pinus resinosa*)
water birch (*Betula occidentalis*)
white birch (*Betula papyrifera*)
white spruce (*Picea glauca*)
wild ginger (*Asarum canadense*)
wild rice (*Zizania aquatica*)

Mammals:

beaver (*Castor canadensis*)
black bear (*Ursus americanus*)
lynx (*Lynx canadensis*)
moose (Alces alces)
American marten (*Martes americana*)
red fox (*Vulpes vulpes*)
river otter (*Lutra canadensis*)
snowshoe hare (*Lepus americanus*)
timber wolf (*Canis lupus*)
white-tailed deer (*Odocoileus virginianus*)
woodland caribou (*Rangifer tarandus caribou*)
wolverine (*Gulo gulo*)

Fish:

burbot (*Lota lota*)
cisco (*Coregonus artedi*)
common White Sucker (*Catostomus commersoni*)
lake whitefish (*Coregonus clupeaformis*)
mooneye (*Hiodon tergisus*)
muskellunge (*Esox masquinongy*)
northern pike (*Esox lucius*)
rock bass (*Ambloplites rupestris*)
shorthead redhorse (*Moxostoma macrolepidotum*)
smallmouth bass (*Micropterus dolomieu*)
spottail shiner (*Coregonus artedi*)
walleye (*Stizostedion vitreum vitreum*)
yellow perch (*Perca flavescens*),

Birds:

American white pelican (*Pelecanus erythrorhynchos*)
American wigeon (*Anas americana*)
arctic tern (*Sterna paradisaea*)
bald eagle *(Haliaeetus leucocephalus*)
black-capped chickadee (*Poecile atricapillus*)
blackburnian warbler (*Dendroica fusca*)
boreal chickadee *(Poecile hudsonica*)
brown-headed cowbird (*Molothrus ater*)
common goldeneye *(Bucephala clangula)*
common raven *(Corvus corax*
great gray owl (*Strix nebulosa*)
Lapland longspur (*Calcarius lapponicus lapponicus*)
magnolia warbler *(Dendroica magnolia)*
ruby-crowned kinglet *(Regulus calendula)*
ruffed grouse *(Bonasa umbellus)*
rusty blackbird (*Euphagus carolinus*)
white-breasted nuthatch (*Sitta carolinensis*)

Figure 2 Regional Setting

Pakwash

0 10 20 40 km

1:1,537,975

Legend

- Community
- First Nation Community
- Highways
- Railway
- Lakes
- Provincial Park
- Conservation Reserve
- Manitoba
- Ontario

Ontario

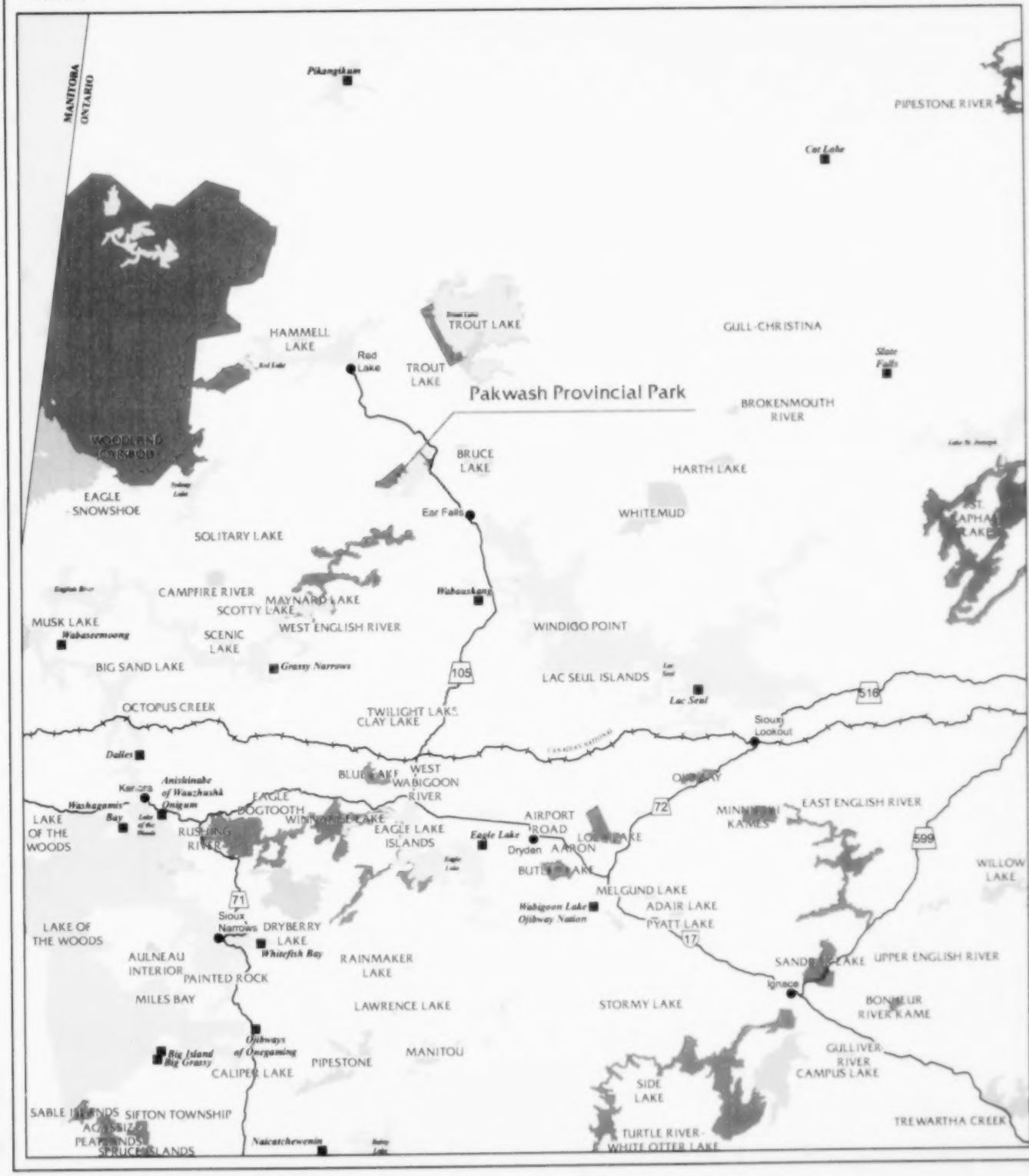


Figure 2 — Regional Setting

Figure 3

Adjacent Land Use

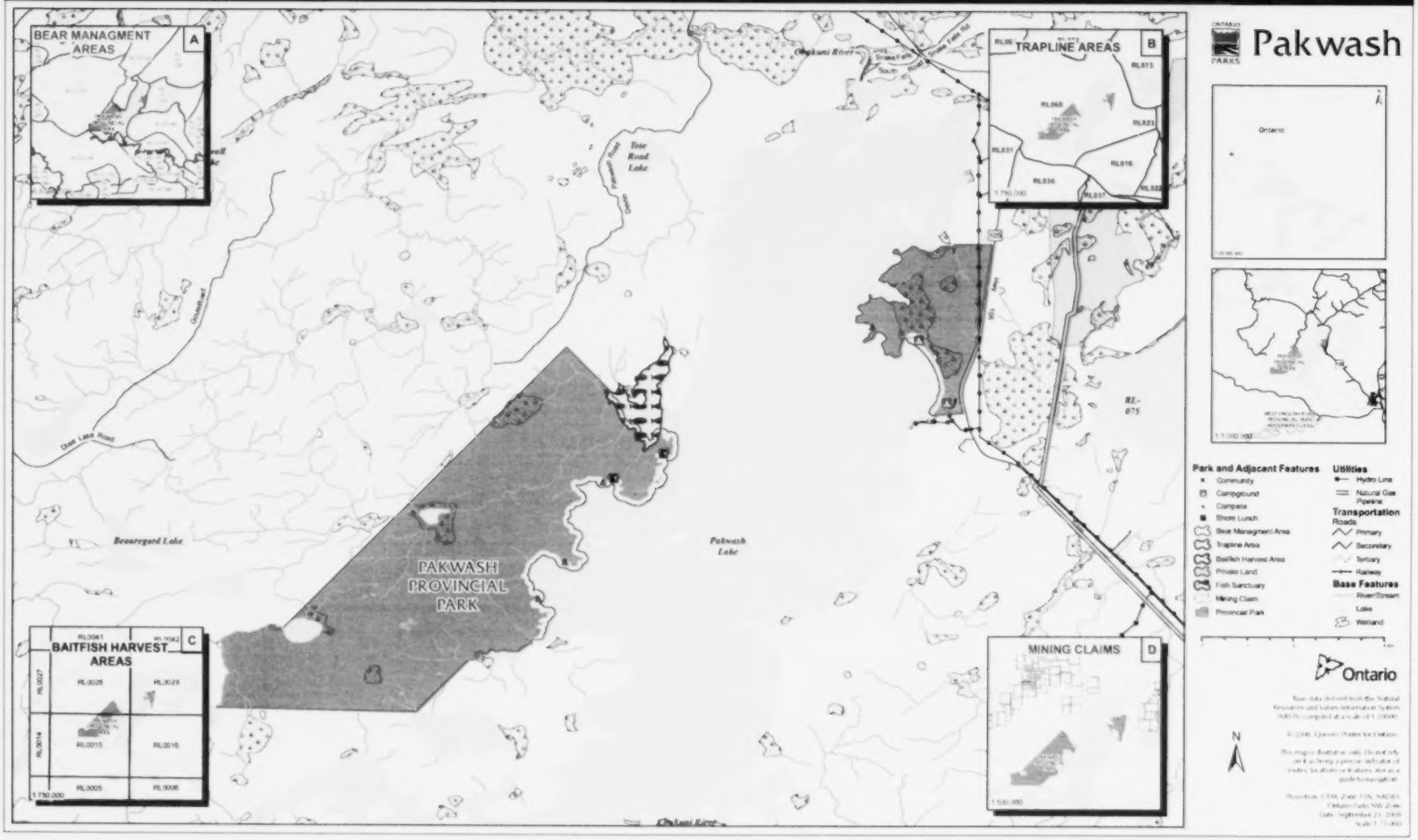


Figure 4

Proposed Zoning

ONTARIO PARKS

Pakwash

0 1 2 4 km

1:100,000

Legend

Proposed Zones
- Access
- Natural Environment
- Natural Environment (Lakebed)
- Nature Reserve
- Development

Base Features
- River/Stream
- Lakes
- Wetland

Utilities
- Hydro Line
- Natural Gas Pipeline
- Primary Roads
- Park Roads

Ontario

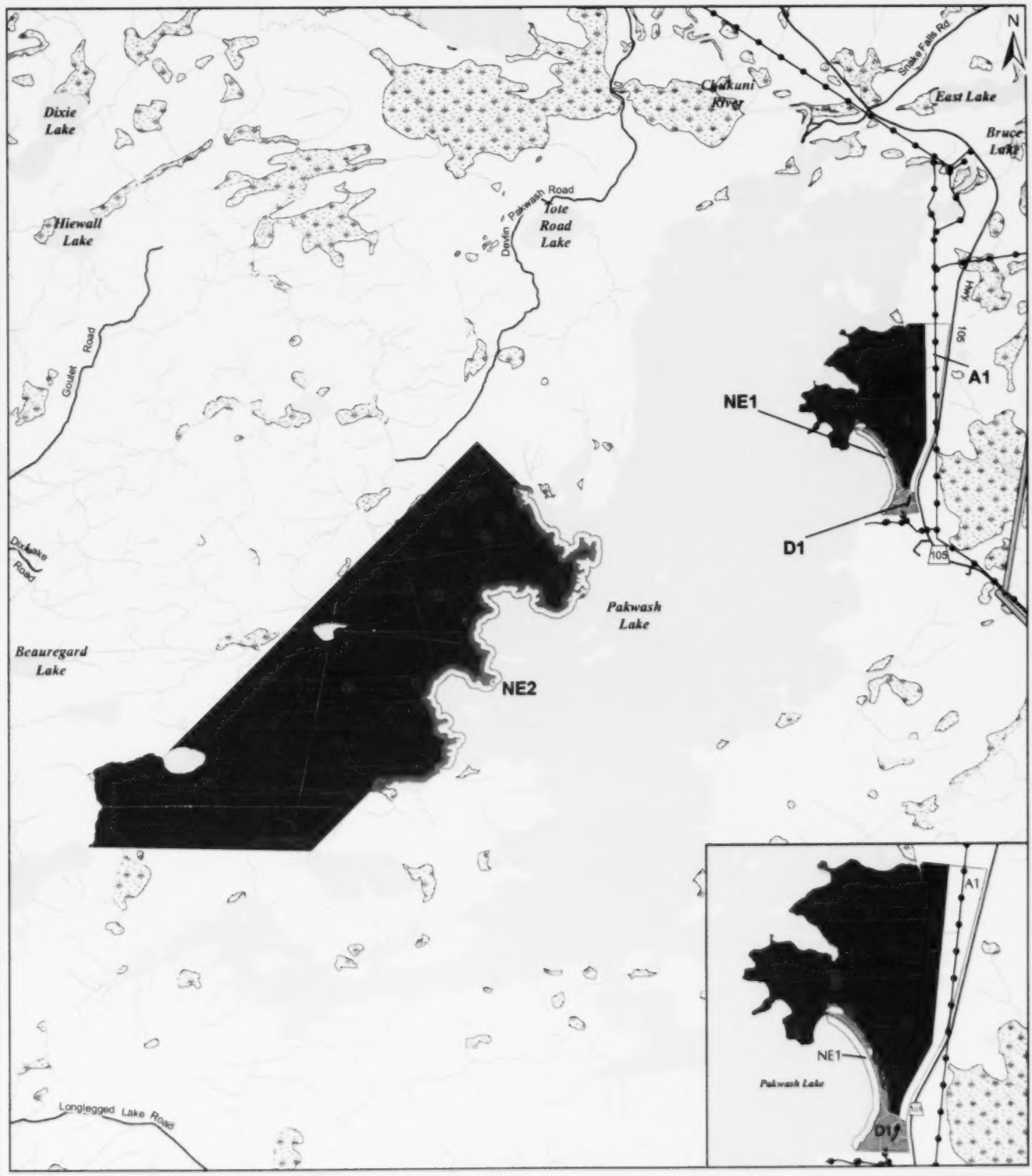
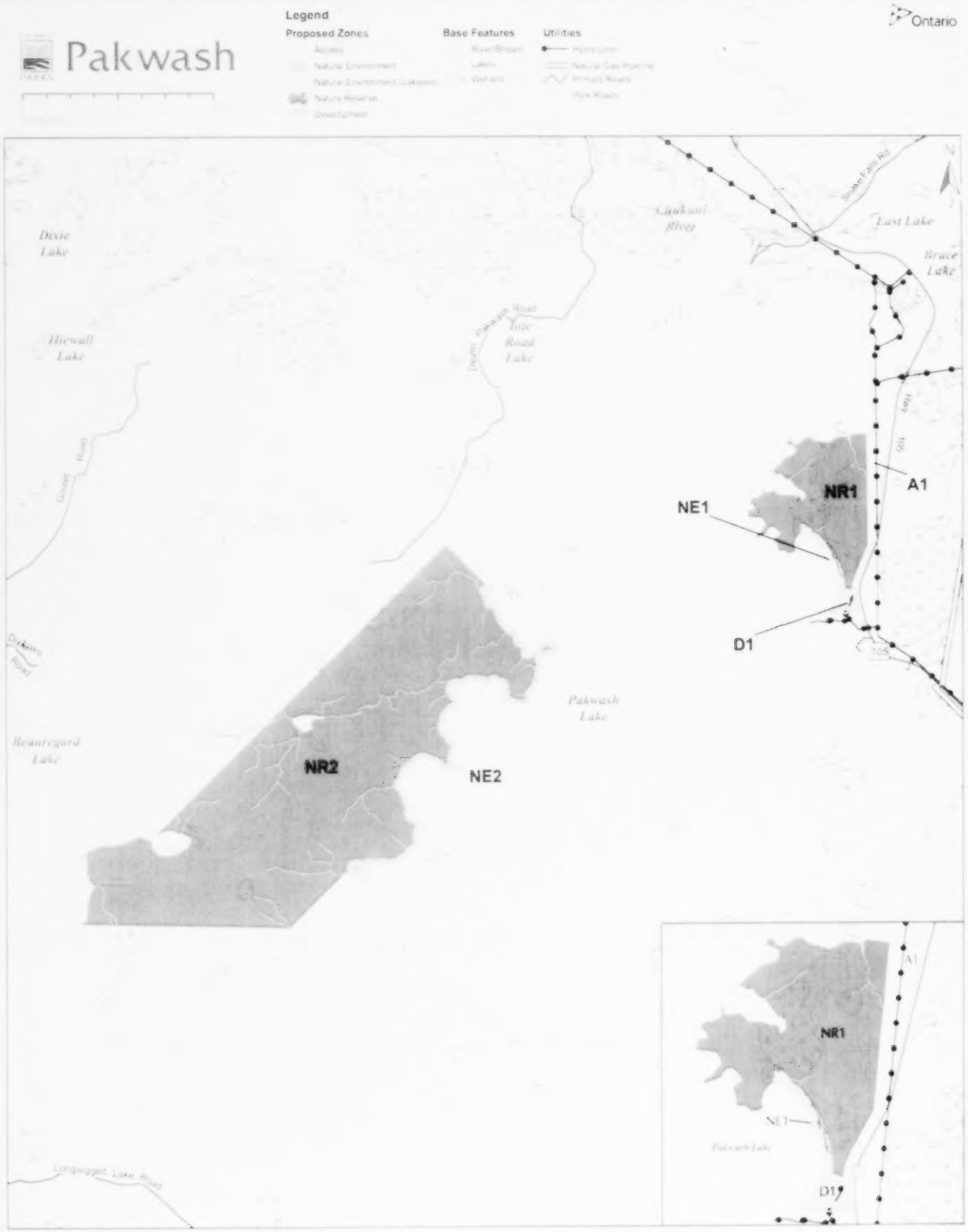


Figure 4 Proposed Zoning



Pakwash

Provincial Reference Map

Legend

Park Development
- Campground
- Campsite
- Picnic Shelter
- Shore Lunch
- Playground
- Gatehouse
- Fish Cleaning Station
- Comfort Station
- Boat Launch
- Boardwalk
- Beach

Other Point Features
- RAP (cons DLS)
- Interesting Vegetation
- Interesting Fauna
- Trapper Cabin

Line Features
- Interpretive Trail
- Canoe Route
- Primary Road
- Secondary Road
- Tertiary Road
- Hydro Line
- Streams
- Cottage Residential Area
- Tourist Establishment
- Park Boundary
- Lakes
- Wetlands

Proposed Park Zoning
- Development
- Access
- Natural Environment (Lakebed)
- Natural Environment
- Nature Reserve

0 75 150 300 450 600 750 m

Ontario

Base data derived from the Natural Resources and Values Information System (NRVIS) compiled at a scale of 1:20000

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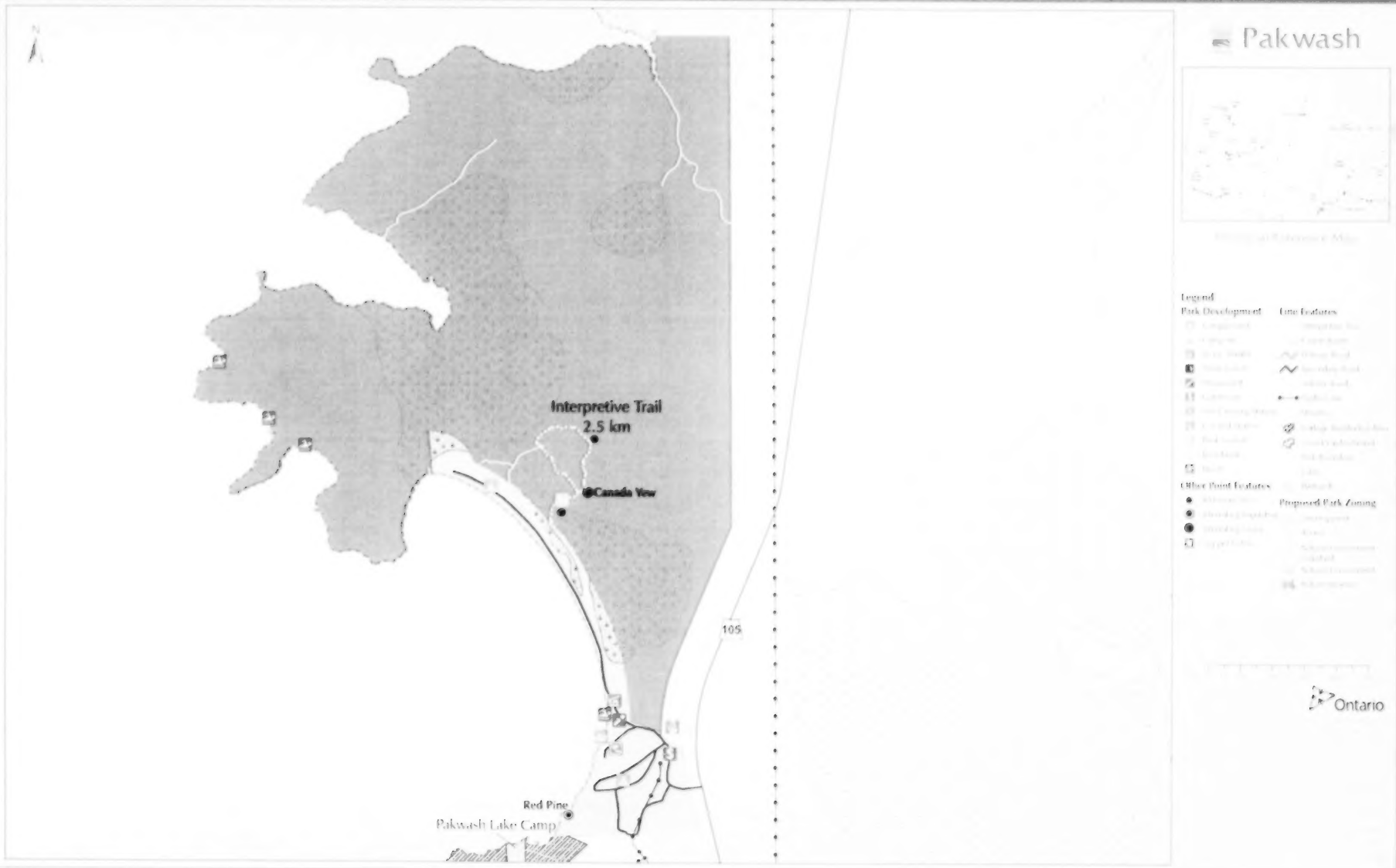
This map is illustrative only. Do not rely on it as being a precise indicator of routes, locations or features, nor as a guide to navigation.

Projection: UTM, Zone 15N, NAD83
Ontario Parks Northwest Zone Office
Date: September 25, 2008
Scale: 1:15,000


Pakwash
Interpretive Trail
2.5 km
Canada Yew
105
Red Pine
Pakwash Lake Camp
Legend
Park Development
Line Features
Other Point Features
Proposed Park Zoning
Ontario